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# ACCEPTED MANUSCRIPT

## Antibacterial properties of sophorolipid-modified gold surfaces against Gram positive and Gram negative pathogens

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**Graphical Abstract** 



### Highlights

- •
- Successful Adsorption of Sophorolipids on gold surfaces at various concentrations.
- •
- The initial concentration of Sophorolipids solutions affects the amount of grafted molecules monitored by XPS and QCM-D.
- •
- The biocidal activity was monitored by contact of bacterial strains on the coated substrates compared to bare surfaces.
- Sophorolipid-modified gold surfaces are biologically active against Gram positive and Gram negative pathogens

#### ABSTRACT

Sophorolipids are bioderived glycolipids displaying interesting antimicrobial properties.

We show that they can be used to develop biocidal monolayers against Listeria ivanovii, a

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